

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/014359

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/198 A61K31/225 A61K31/185 A61K31/385 A61K31/07
A61K31/375 A61K31/355 A61P13/12 A61P39/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, MEDLINE, EMBASE, SCISEARCH, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 794 124 A (YAMAMOTO ET AL) 27 December 1988 (1988-12-27) column 2, lines 25-54 column 3, lines 1-14 column 6, lines 11-16 -----	1,3,6,8, 9
X	US 4 849 452 A (DULCE ET AL) 18 July 1989 (1989-07-18) column 2, lines 24-44 column 2, line 60 - column 3, line 11 claims ----- -/-	1,3,6

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

2 May 2005

Date of mailing of the international search report

11/05/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 93/14750 A (THE ROCKEFELLER UNIVERSITY; ALTEON INC) 5 August 1993 (1993-08-05) page 5, line 11 - page 6, line 6 page 6, lines 29-32 page 7, lines 10-20 page 17, lines 6-22 claims 1,7,15,17,31	1,6
X	US 5 607 974 A (DROEGE ET AL) 4 March 1997 (1997-03-04) column 1, lines 51-60 column 2, lines 11-40 column 2, lines 52-67 column 3, lines 14-19	1-3,6-9
X	US 4 792 549 A (TAKAHASHI ET AL) 20 December 1988 (1988-12-20) column 1, lines 5-11 column 2, lines 58-67 examples 1,2,4-6 claims 1,2	1,5,6
X	WO 02/34303 A (NITROMED, INC; TRUSTEES OF BOSTON UNIVERSITY; LOSCALZO, JOSEPH; VITA,) 2 May 2002 (2002-05-02)	1,6
A	page 1, lines 9-17 page 14, line 23 - page 15, line 8 page 21, lines 4-13 page 22, lines 18-22 page 30, lines 18-23 claims 1-4,14,17,23-25,27,44,45,47,49-51	8,9
X	US 2002/137785 A1 (KINDNESS GEORGE ET AL) 26 September 2002 (2002-09-26)	1,5,6
A	page 1, paragraphs 2,4,8 pages 1-2, paragraph 15 page 2, paragraph 18 page 4, paragraph 34 page 5, paragraph 42 pages 5-6, paragraphs 44,45 claims 1,29	8
X	US 6 060 446 A (ZALOGA ET AL) 9 May 2000 (2000-05-09) column 1, line 61 - column 2, line 2 column 2, lines 26-31 column 4, lines 32-40 column 5, lines 30-38 column 5, line 55 - column 6, line 59 claims 1,2,6	1,5,6
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI 6 September 1991 (1991-09-06), Derwent Publications Ltd., London, GB; Class 914, page 2, AN 1991-306713 XP002326744 FUNATO TOSHIKI ET AL.: "Oral amino acid preparation for cardiac failure" & JP 03 204814 A (OTSUKA SEIYAKU KOGYO KK) 6 September 1991 (1991-09-06) abstract</p>	1,3,6,8
X	<p>DE 34 14 491 A1 (DIETL, HANS, DR) 24 October 1985 (1985-10-24) claims 1,3,5,6 page 3, lines 1-32 page 4, line 12 - page 5, line 25 page 6, lines 26-30</p>	1,2,4,6
X	<p>DATABASE WPI 23 August 1990 (1990-08-23), Derwent Publications Ltd., London, GB; Class 904, page 0, AN 1990-301258 XP002326745 ITO TADA0: "Hepatopathy inhibitor" & JP 02 212424 A (TOTOSHU SEIZO KK) 23 August 1990 (1990-08-23) abstract</p>	6
A		5
X	<p>MOBERLY JAMES B ET AL: "Elevation of whole-body glutathione in peritoneal dialysis patients by L-2-Oxothiazolidine-4-carboxylate, a cysteine prodrug (Procysteine)" JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY, vol. 9, no. 6, June 1998 (1998-06), pages 1093-1099, XP008046078 ISSN: 1046-6673 abstract page 1093, column 2, paragraph 2 page 1094, column 1, paragraph 2 page 1095, column 2, paragraph 2 page 1097, column 2, paragraph 3 - page 1098, column 1, paragraph 2</p>	1-3,7
Y	<p>US 6 627 659 B1 (SANTANGELO FRANCESCO) 30 September 2003 (2003-09-30) column 1, lines 39-49 claims 1,2,7-9,12,14-16,19,21</p>	1-5,7,9
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 00/53176 A (UNI-CI S.R.L; DALL'AGLIO, ROBERTO; BORGONOVO, MARGHERITA; INTROINI, CA) 14 September 2000 (2000-09-14) page 1, lines 3-15 page 1, line 26 - page 2, line 1 page 2, lines 22-34 page 5, line 33 - page 6, line 20 page 7, lines 6-12 claims 1,3,4,7	1-5,7,9
A	WO 00/44375 A (MARS UK LIMITED; HARPER, E., JEAN) 3 August 2000 (2000-08-03) page 1, lines 15-21 page 3, lines 11-15 page 6, lines 1,2 page 6, lines 27-30 page 7, lines 16-19 page 8, line 24 - page 9, line 11 page 10, line 24 - page 11, line 14 page 13, lines 6-14 page 16, lines 20-27 claims 7,9-11,14,15,27,32	5
A	EP 0 958 816 A (ASTA MEDICA AKTIENGESELLSCHAFT) 24 November 1999 (1999-11-24) page 2, paragraph 1 page 3, paragraph 11 pages 6-7, paragraphs 26,27 page 7, paragraph 31	5
A	BOSTOM A G ET AL: "LACK OF EFFECT OF ORAL N-ACETYLCYSTEINE ON THE ACUTE DIALYSIS-RELATED LOWERING OF TOTAL PLASMA HOMOCYSTEINE IN HEMODIALYSIS PATIENTS" ATHEROSCLEROSIS, AMSTERDAM, NL, vol. 120, no. 1-2, 1996, pages 241-244, XP000991283 ISSN: 0021-9150 abstract page 242, column 1, paragraph 2 - column 2, paragraph 1 page 243, column 1, paragraphs 3,4 page 243, column 2, paragraph 2	1,2,7
A	M. H. BEERS; R. BERKOW: "The Merck Manual of Diagnosis and Therapy, Seventeenth Edition" 1999, MERCK RESEARCH LABORATORIES, WHITEHOUSE STATION N.J., XP002326823 page 1841 - page 1848	

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 7-9 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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